Office of the State Actuary

2001 Report on Cost-of-Living Adjustments
(COLA Report)

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Introduction:

The 2001 Report on Cost-of-Living Adjustments is an annual update on the economic and demographic characteristics of Plan 1 Public Employees' (PERS) and Teachers' (TRS) Retirement System annuitants. The number of Plan 1 members and the expense of funding annual benefit increases to this group in particular, elicits a natural interest from the Legislature. Primarily for comparative purposes, this report also includes information on the status of annuitants in other Washington retirement plans.

Gain-sharing is a second way benefits may be increased for members in certain retirement plans. It is conditioned on the extraordinary earnings of retirement fund investments. In 2001, no gain-sharing calculations were scheduled to occur. The results of past distributions and calculations for the scheduled 2002 gain-sharing are included in this report.

The goal of this annual report is to provide legislators and the public with a profile of current retirement benefit recipients. It also analyzes the factors that determine who receives a COLA and how the size of that increase is determined. The source of the data used is information collected and maintained by the Department of Retirement Systems. Unless otherwise indicated, data is as of July 31, 2001.

Overview:

Cost-of-Living Adjustments:

Cost-of-living adjustments (COLAs) are the element of retirement benefits which are designed to compensate for expected inflation. The state of Washington has adopted a variety of approaches to providing this benefit to retirees and their beneficiaries. Differences continue to exist in eligibility requirements and the level of income protection provided by the various designs, but in general, plans have become more uniform in recent years.

Current COLAs share four characteristics. They are:

Automatic: Not subject to legislative approval.
Permanent: COLAs are ongoing features of the plans.
Cumulative: Additional COLAs are added each year.
Compounding: The amount of COLA rises each year.

Benefit tiers developed since 1977, (Plans 2/3) include a 3% COLA design. COLAs for plans developed prior to 1977 (Plans 1) differ substantially. The original designs range from LEOFF 1 with it's full CPI COLA to PERS/TRS 1 which provided only ad hoc COLAs. No two plans had identical cost-of-living provisions.

Table #1

Plan	Members Receiving	Description	Eligibility
PERS/TRS 1	**40,278** **20,063**	***Uniform/Minimum Benefit:*** A flat dollar amount per month per year of service which is increased each year by 3%.	• Age 66 or older and retired one year. • Age 65 or younger; and benefit less than the minimum benefit \$28.33 per month per year of service, (as of 7/1/00.)
	27	***Age-65:*** Annual increase of up to 3%, based on an increase in the CPI.	When benefit received at age 65 has lost over 40% of its purchasing power.
LEOFF 1	**7,886**	Annual increase in CPI; compounding. No minimum benefit provided.	Benefit in effect for at least one year.
WSP	**695**	Annual increase in the CPI up to 3%; compounding.	Benefit in effect for at least one year.
LEOFF/PERS/ TRS/SERS 2	**9,295**	Annual increase in the CPI up to 3%; compounding. No minimum benefit provided.	Benefit in effect for at least one year.
TRS/SERS 3	**222**	Defined benefit is increased same as Plan 2. No minimum benefit provided.	One year after defined benefit payments are initiated.

When the Uniform COLA was enacted for PERS/TRS 1 in 1995, all previous COLAS for these systems were discontinued. Members eligible for a higher benefit under the Age-65 formula continue to receive benefits calculated using that formula. There were only 27 such members in 2001.

Gain-sharing:

Unlike the automatic COLAs summarized in the table above, gain-sharing is contingent on the performance of retirement fund investments. In addition, the Legislature reserves the right to amend or repeal this benefit in the future.

Gain-sharing is implemented differently in PERS/TRS 1 and Plans 3. In Plan 1, extraordinary gains boost increases in the Uniform COLA. Plan 3 extraordinary gains are distributed as a lump sum payment to eligible active and retired members' defined contribution accounts.

Characteristics of Benefit Recipients:

Former active members comprise the majority of people receiving public retirement benefits in all Plans. A small percent of recipients are the survivors or beneficiaries of the member. "Annuitants" refers to all benefit recipients, whether former members or their survivors.

Table #2

Summary of Annuitants	PERS/TRS 1	LEOFF 1	WSP	Plans 2/3
Total Number	85,425	7,886	695	9,517
Average				
Current Age	72	64	63	69
Age at Retirement	60	51	53	65
Years of Service	23	22	29	12
Monthly Benefit	$ 1,206	$ 2,618	$ 2,644	$ 560
Monthly Benefit per YOS	$ 50	$ 138	$ 96	$ 46

Summary of COLA Payments:

The additional payments from all 2001 COLAs were more than $27M over COLA payments made in 2000. Table 3 shows where additional benefits were generated based on data compiled for the 2000 valuation and 7/1/01 Uniform COLA calculation.

Table #3

2001 COLA Increases
(As of 9/30/01)

System/Plan	Recipients	Annual Payments
Plan 1		
PERS	40,003	$ 10,201,763
TRS	19,944	6,532,956
LEOFF	7,590	8,727,791
Plan 2		
PERS	7,429	$ 1,363,278
TRS	558	159,767
LEOFF	122	37,921
Plan 3		
TRS	113	13,595
WSP	692	627,329
Total	76,451	$ 27,664,401

Table #4

Incremental Cost of the Uniform and Minimum COLA[1]
(As of 7/01/01)

Year	PERS/TRS Recipients	Increase in Uniform/Minimum COLA
1995	57,425	$ 8,017,053
1996	57,577	8,358,648
1997	59,412	8,996,737
1998	59,452	9,222,350
1999	59,367	11,208,033
2000	60,008	16,056,882
2001	60,302[2]	16,761,587

[1] *Assumes all recipients who receive COLA beginning July 1, continue to receive benefits through the entire fiscal year.*
[2] *Different effective dates for the data used in Tables 3 and 4 produce slight differences in the totals shown for TRS and PERS recipients.*

Eligibility for Social Security Increases:

Almost all public employees are required to contribute to the federal Old Age, Survivors and Disability Insurance program – better known as Social Security. This benefit provides retirement benefits which increase at the same rate as the national Consumer Price Index (CPI). Adjustments are made each January. Retirees do not have to be retired for a certain amount of time before becoming eligible for this increase. In recent years, increases in Social Security were as follows:

Table #5

Historical Increases to Social Security Benefits

1976-85	1986-95	1996	1997	1998	1999	2000
7.2%	3.4%	2.9%	2.1%	1.3%	2.5%	3.5%

Plan 1 COLAs:

Benefit Descriptions:

Retirees of PERS 1 and TRS 1 receive increases to their retirement benefits through the Uniform COLA. Law Enforcement and Fire Fighters' Retirement System Plan 1 (LEOFF 1) members receive adjustments based on increases in the Seattle Consumer Price Index (CPI). The focus of this section is to provide information about PERS/TRS 1 COLA recipients and non-recipients. Information about LEOFF 1 benefit increases is included at the end of this section.

- ***Uniform COLA***

  To be eligible for this annual adjustment, retirees must satisfy one of two criteria:

  - Be age-66 or older and retired for at least one year by July 1; or
  - Receive a benefit that is below the minimum threshold.

  The adjustment, known as the "annual increase," is based on a flat amount per month per year of service. The annual increase for July 1, 2001 was $1.11. At this amount, an eligible retiree with 30 years of service would have received an increase of $33.30 per month starting July 1st. (30 x $1.11 = $33.30.)

  The annual increase itself increases each year by 3%. The annual increase on July 1, 2002 will be $1.14. ($1.11 x 1.03 = $1.14.)

  The Uniform COLA may be further increased by a gain-sharing distribution in even-numbered years. Gain-sharing increases become a permanent part of the base Uniform COLA amount used to calculate future 3% increases. Graph #4 on page 10 illustrates this process.

- ***Minimum Benefit COLA***

  Retirees younger than age 66 may receive the Uniform COLA if their benefit falls below the minimum benefit threshold. The minimum benefit acts as a threshold or trigger for eligibility to receive the Uniform COLA.

The minimum benefit threshold is increased each July 1 by the same annual increase amount determined for the Uniform COLA. On July 1, 2001 the minimum benefit threshold was $29.44. It will increase by $1.14 to $30.58 on July, 2002.

Retirees who are above the minimum threshold may become eligible for the Uniform COLA in the future if the minimum increases beyond their benefit.

- ***Plan 1 Gain-sharing***

Plan 1 gain-sharing is a conditional benefit that increases the amount of the Uniform COLA when extraordinary gains occur. "Extraordinary gains" is a term defined in statute. They occur when the rate of return (ROR) on PERS/TRS 1 retirement fund investments for the previous two bienniums, (4 years) averages over 10%. The amount of each gain-sharing increase is dependent on the amount of extraordinary gains.

The gain-sharing amount is determined in odd-numbered years by applying the ROR in excess of 10%, to half the assets held on July 1st of that year. Half of the gain-sharing amount is used to provide a permanent increase in the Uniform COLA beginning in January of the following year.

All members, active and retired, realize the benefits of gain-sharing, but not simultaneously. Retired members receive an immediate increase in the Uniform COLA amount when extraordinary gains are realized. Active members realize gain-sharing benefits after retirement. At this time they become eligible for a COLA amount which has been increased by past gains.

Extraordinary gains cannot be expected on a regular basis or in predictable amounts. Gain-sharing produces highly erratic results from biennium to biennium. It is likely there will be long periods of time when no extraordinary gains occur. When they do occur, they may be very small or substantial. The gain-sharing calculations for the 1999-01 and 2001-03 bienniums illustrate this volatility.

Table #6

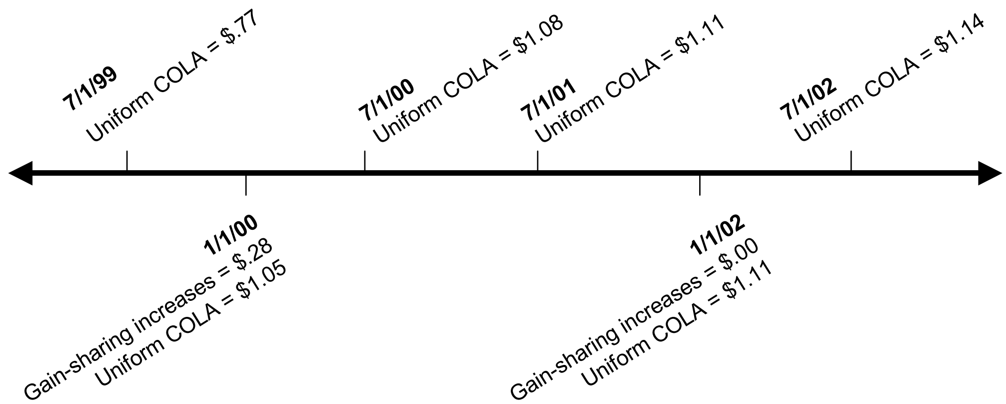
Historical Rate of Return for PERS/TRS 1 Funds

Biennium	1996	1997	1998	1999	2000	2001	4-year Average
1999-01	17.4%	20.5%	16.6%	11.9%	N/A	N/A	16.56%
2001-03	N/A	N/A	16.6%	11.9%	14.9%	(5.96)%[1]	8.80%[1]

[1] Best estimate as of publication.

In 1999, the gain-sharing calculation indicated that $634 M in extraordinary returns was available to fund an increase in the Uniform COLA. This resulted in a permanent increase to the Uniform COLA of $.28 per month per year of service in 2000. This year, the calculation indicates no extraordinary returns were realized during the previous four years. As a result, no gain-sharing increases will occur in 2002. The chart below shows the timing of Plan 1 benefit increases since 1999.

Sequence of PERS/TRS 1 Increases
1999-2002



COLA Policy for PERS/TRS 1:

Eligibility for a COLA in PERS/TRS 1 is shaped by policies implicitly and explicitly adopted by the Legislature.

The age-66 trigger for eligibility is significant for several reasons:

- It is the age when members of the Plan 2/3 systems are first eligible to retire and, after one year, (when they are 66), begin receiving the 3% COLA. The benefit provided to Plan 1 members does not start earlier than that provided to Plan 2/3 members.

- It approximates the age requirement for full Social Security benefits.

- It is considered the age when workers were most likely to permanently leave the workforce. At this point they lose the ability to replace losses in purchasing power with employment income.

In almost all of Washington's public plans COLA increases are based on a percent of benefit. The amount of the retiree's monthly benefit is multiplied by a percentage, and increases compound from year to year. This approach provides more dollars to those retirees with larger benefits. The Uniform COLA is distributed based on the member's years of service. This approach distributes the largest increases to those members who have provided the longest service.

Demographics of Plan 1 Retirees:

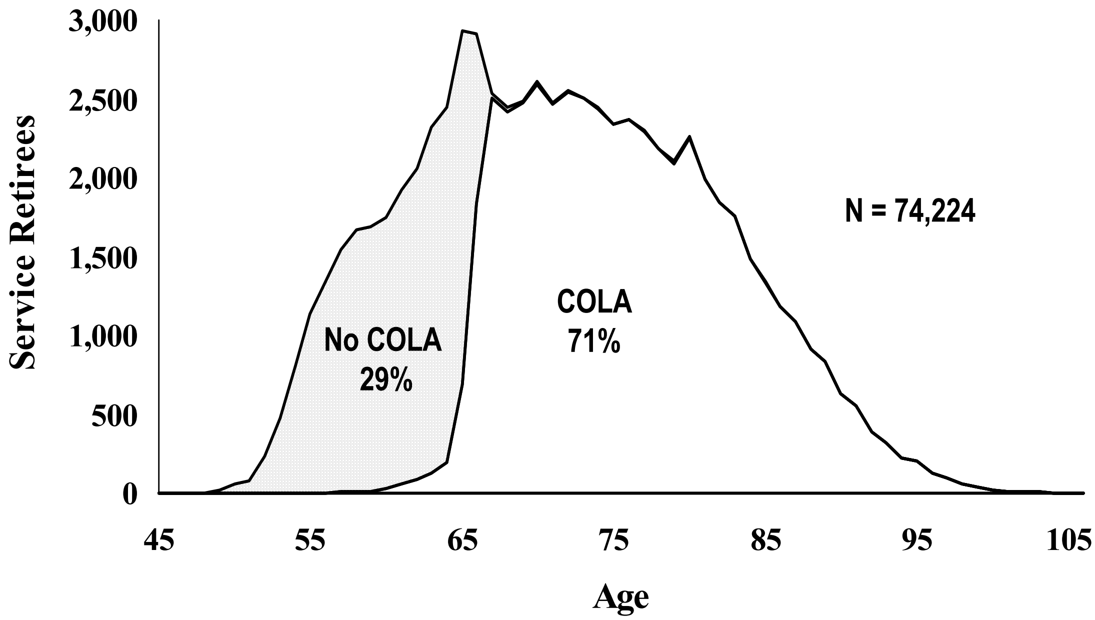
Of the 85,425 annuitants receiving retirement benefits in PERS/TRS 1, fully 70% receive an annual cost-of-living increase. Increases for individual members were calculated on an average of 19 years of service in PERS 1 and 25 years in TRS 1. Based on the July 1, 2001 Uniform COLA amount of $1.11, the average Plan 1 retiree saw an increase between $21.09 and $27.75 per month.

Table #7

Summary of PERS/TRS 1 Annuitants	Receiving Uniform/Minimum		Not Receiving Uniform/Minimum	
	PERS 1	TRS 1	PERS 1	TRS 1
Total Number	40,278	20,063	13,092	11,992
Average				
Current Age	78	77	60	60
Age at Retirement	63	61	56	56
Year of Retirement	1986	1985	1997	1997
Years of Service	19	25	26	28
Monthly Benefit	$ 843	$ 1,144	$ 1,844	$ 1,837
Monthly Benefit per Year of Service	$ 42	$ 46	$ 69	$ 66

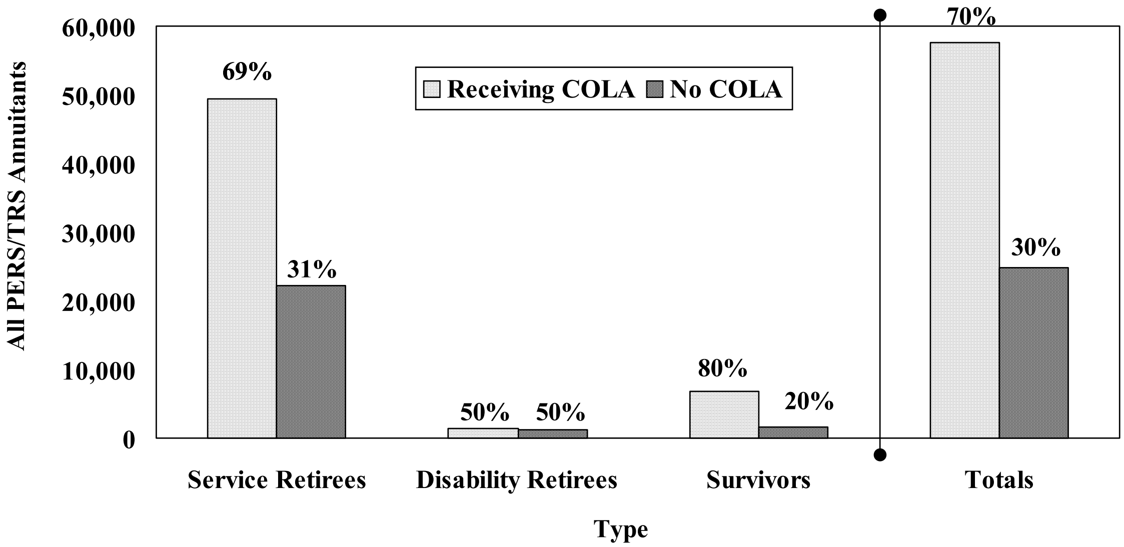
Graph #1

PERS/TRS Plan 1 COLA Status by Age



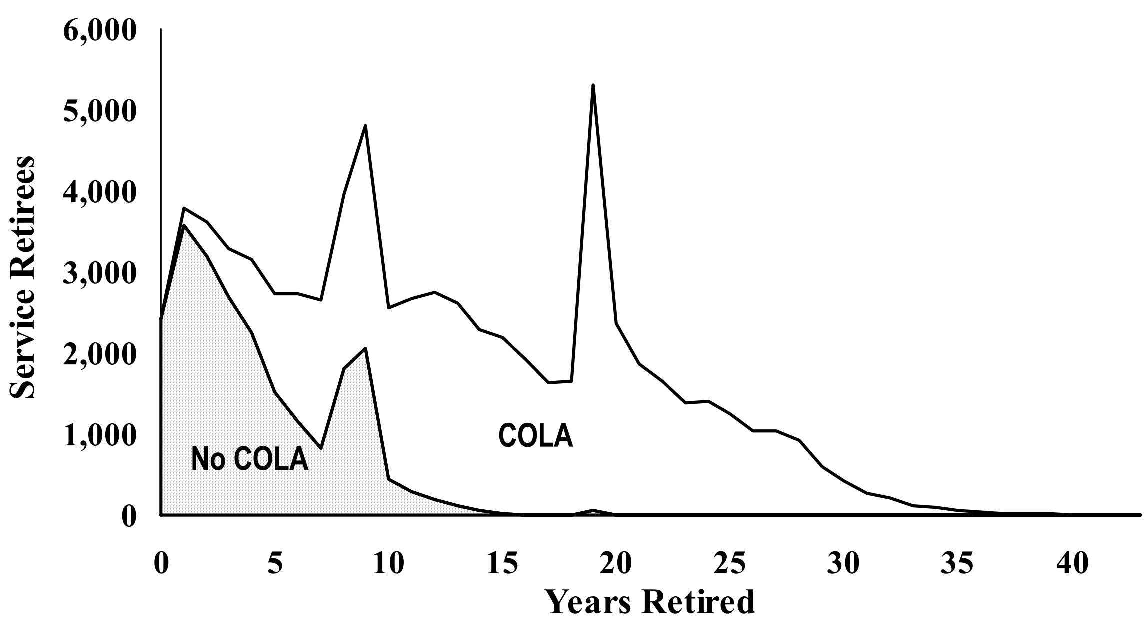
Whether an annuitant receives a COLA is largely a function of age. Almost all annuitants will eventually qualify for the Uniform COLA. Members born before July 1 and retired for at least one year, begin receiving the Uniform COLA the year they turn age-66. Members born after July 1, begin receiving the COLA the following July 1 when they are between the ages of 66.5 and 67.

Graph #2
PERS/TRS Plan 1 COLA Status by Benefit Type



Annuitants qualify for benefits under three scenarios. Most often, they are service retirees, members who have met the age and/or years of service requirements to begin receiving benefits. In other cases, they qualify as disability retirees or as the designated survivor of a retiree. Graph 2 shows the number of annuitants receiving or not receiving a Plan 1 COLA according to these three categories.

Graph #3
PERS/TRS Plan 1 COLA Status by Years Retired



Graph 3 displays the numbers of service retirees receiving and not receiving a COLA according to how long the retiree has been retired.

The relatively early retirement provided in Plan 1 (any age with 30 YOS; 55 with 25 YOS; and age-60 with 5 YOS) means that many retirees will not qualify for a COLA in their first years of retirement. Members who have been retired the longest are most likely to be receiving a COLA. Annuitants with retirement dates prior to 1985 (16 years ago) and still not receiving a COLA are primarily beneficiaries who have not yet attained age-66.

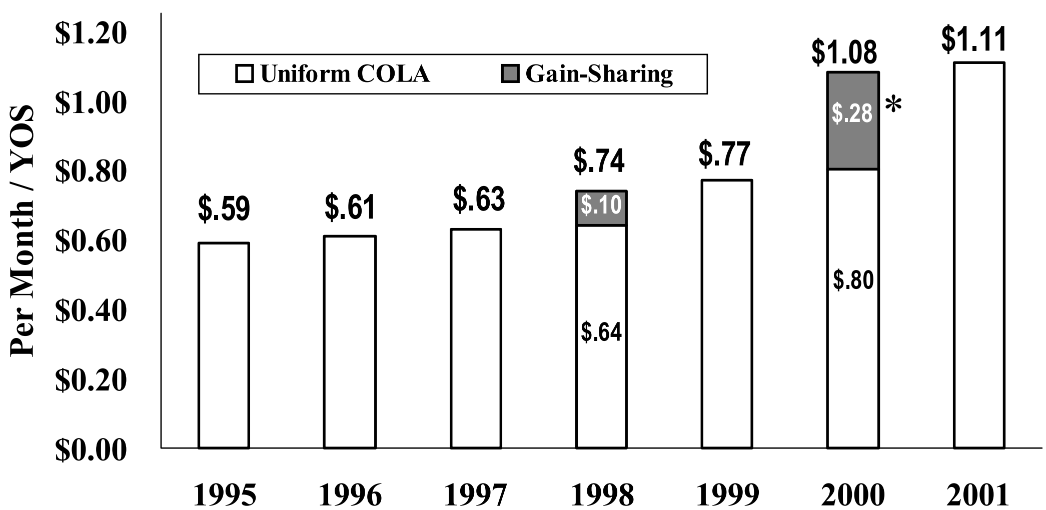
Spikes in the graph are the results of early retirement windows offered in previous years. During those periods, unusually large numbers of members retired, some at relatively young ages. Some of these members have yet to reach COLA eligibility (age-66), even after several years of retirement.

The Uniform COLA Design:

The size of the annual increase grows each year by 3%. In even-numbered years gain-sharing may boost the COLA further. Graph #4 shows the growth of the Uniform COLA since inception and the effect the two gain-sharing distributions have had on the current level of the COLA.

Graph #4

Uniform COLA Increases



*Gain-sharing increase occurs January 1. Uniform COLA increases July 1.

Retirement benefits are based on the number of years of service and the average final salary the member earned before retirement. When looking at a member's benefit that is small it is impossible to tell whether it is small because the member had very little service credit, a low salary, or both. It is more informative to look at a retiree's benefit on a per year of service basis. For example, if a retiree receives $800 per month and had 20 years of service, then the retiree receives $40 per month for each of their 20 years ($800 ÷ 20 = $40 per month/YOS).

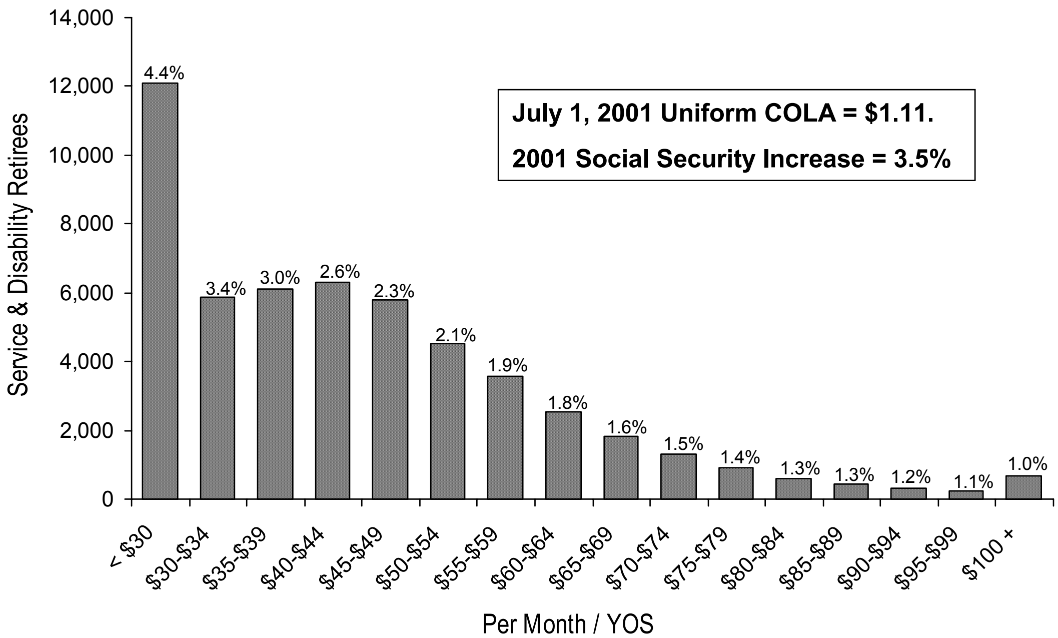
Retirees with a low benefit per year of service must have had a low salary. This could be caused by one or more of the following. The:

- Benefit was calculated using a salary from many years ago;
- Member had a low paying job; or
- Member worked part-time but received full service credit. A part-time salary with full service credit produces a benefit that is indistinguishable from a full-time person who makes a low salary.

Comparing the Uniform COLA to COLAs that provide a percentage increase is difficult. It requires that we calculate the percentage increase in the $/month/YOS each member receives under the Uniform COLA formula. Someone who receives $40 per month/YOS and receives the Uniform COLA increase of $1.11 per month/YOS, recognizes a 2.6% increase in their benefit; ($1.11 / $40.00 = 2.6%). Retirees with higher or lower benefits per month/YOS will recognize differing percentage increases.

Graph #5

PERS/TRS Plan 1 Uniform COLA Percentage Increase



Graph #5 demonstrates the range of percentage increases provided by the July 2000 Uniform COLA. Benefits shown have been adjusted to remove the impact of TRS annuity withdrawals and benefit payments that include survivor options.

The Uniform COLA increase distributed July 1, 2001 was $1.11 per month/YOS. For retirees who receive a benefit less than $30 per month/year of service, this amounted to a 4.4% increase in benefits. Retirees at the other end of the graph, who were receiving benefits of $95 to $99 per month/YOS saw an increase of only 1.1% in their benefits.

As a comparison, Social Security (SS) benefits increase each year by the full increase in the national Consumer Price Index (CPI). In 2000, SS benefits increased by 3.5% for all retirees. LEOFF 1 benefits are increased by changes in the CPI for Seattle. In 2000 benefits for LEOFF 1 retirees increased by 3.7%.

Characteristics of Plan 1 Retirees and Benefits:

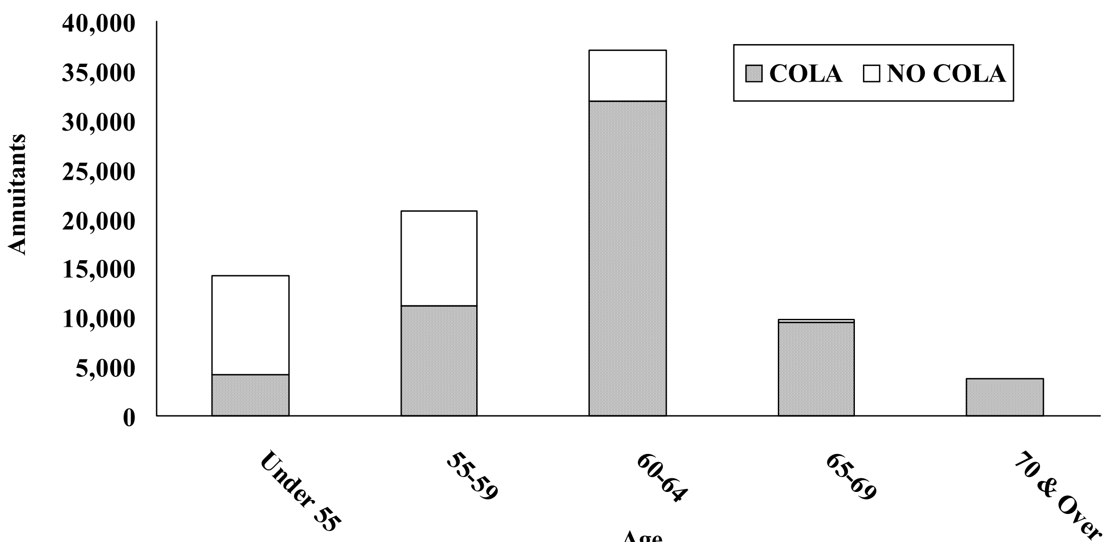
As with any group of 84,000 individuals, there are both differences and similarities among its members. In understanding the impact of the Uniform COLA on PERS/TRS 1 benefits, the following variables are most useful.

Age at Retirement:

Members who retired before age-65 are less likely to be currently receiving a COLA. This is attributed to the age-66 requirement for COLA eligibility. By far, the majority of members leave employment between the ages of 60 and 65.

Graph #6

Member Age at Retirement

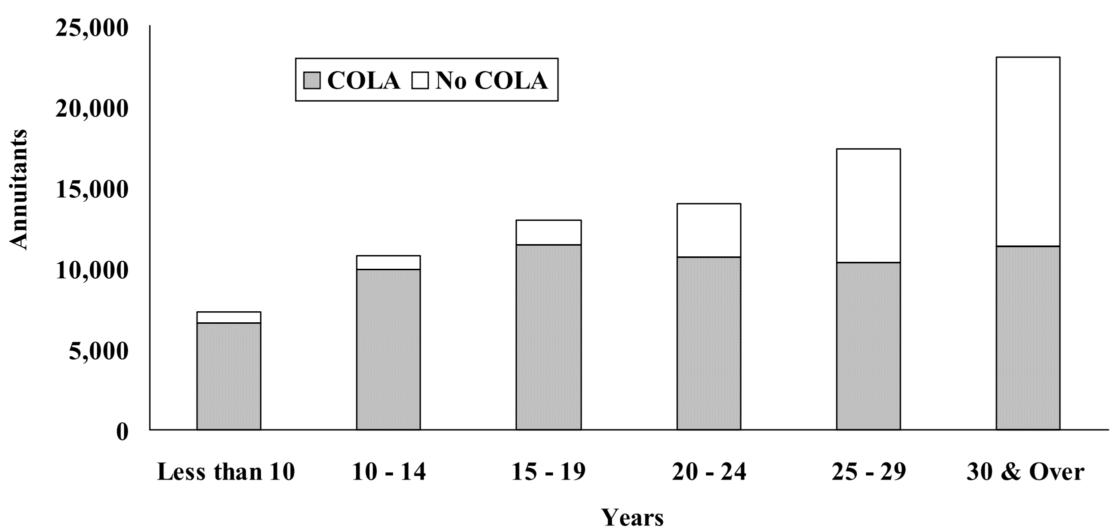


Year of Service:

PERS/TRS 1 retirement eligibility provisions allow members to retire as many as 10 years before they become eligible for a COLA. Members with over 30 years of service are eligible to retire at much younger ages. Shorter-service retirees show a higher percentage of COLA eligibility. Usually they joined the Plan at higher ages and qualified for retirement by attaining age-60 with at least 5 years of service. These members are within 6 years of COLA eligibility.

Graph #7

Years of Service

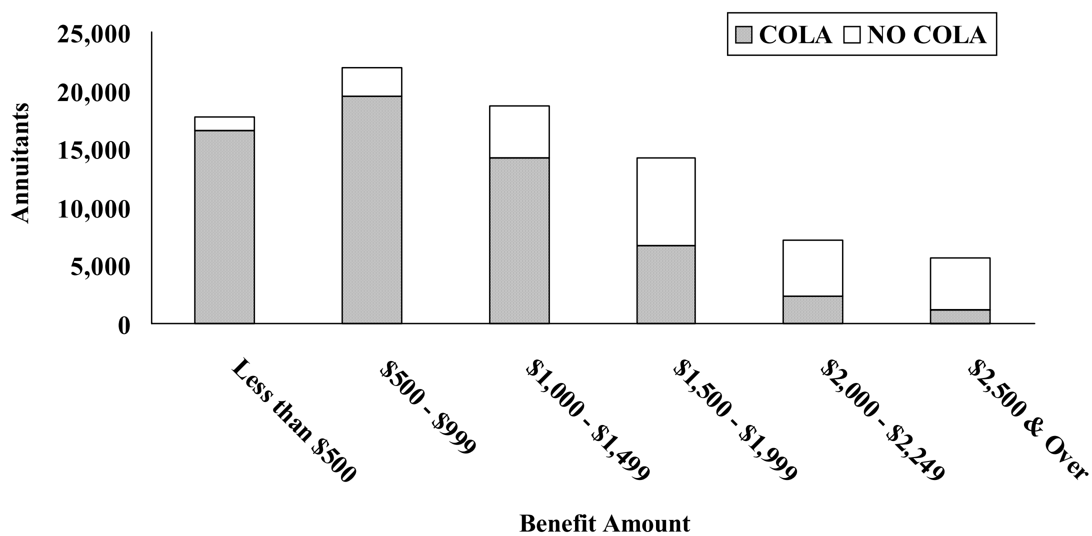


Monthly Benefit:

The distribution of monthly benefits shows a larger percentage of retirees with lower benefits receiving the COLA. This trend is influenced by two factors. Lower monthly benefits generally indicate low service or are based on salaries earned many years ago. Retirees with smaller monthly benefits are more likely to be older and thus eligible for COLA increases. Larger benefits are more likely to represent recent retirement and longer service. More recent retirees and those who retire under service eligibility tend to be younger. A smaller percent of these retirees are currently receiving COLAs.

Graph #8

Monthly Benefit



PERS/TRS 1 Minimum Benefit Recipients:

Minimum Benefit recipients form a relatively small group of Plan 1 retirees. Out of approximately 60,000 retirees receiving COLAs, only about 1,100 (2%) do so under Minimum Benefit eligibility. Members who are receiving a COLA through Minimum Benefit eligibility:

- Had an earned monthly benefit less than $29.44 per month/YOS in 2001; and
- Are less than age-66.

In the current plan design, benefits below the Minimum Benefit threshold are increased by the annual Uniform COLA amount. The threshold acts as a trigger for Uniform COLA eligibility. As the minimum increases each year it advances on the lowest benefit levels. When a benefit level falls below the threshold, it trips eligibility for the Uniform COLA prior to age-66. These annuitants will continue to receive annual increases for the rest of their lives. At age-66, they are not longer tracked as Minimum Benefit recipients, but are counted as Uniform COLA recipients.

When the current minimum benefit design was implemented in 1995, the threshold amount was $24.22 per month/year of service. By July of 2001, The minimum had grown to $29.44 as a result of annual increases and periodic gain-sharing distributions.

Table #8

Summary of Minimum Benefit Recipients	PERS 1	TRS 1
Total Number	922	195
Average		
Current Age	62	62
Age at Retirement	55	52
Year of Retirement	1994	1992
Years of Service	17	17
Monthly Benefit	$ 457	$ 276
Monthly Benefit per Year of Service	$ 26	$ 24

LEOFF 1 COLA:

All LEOFF 1 retirees begin receiving a COLA after they have been retired for one year. In the first year they are eligible for the COLA, they also receive a retroactive increase for the first year of retirement. COLA amounts are equal to the full rise/fall in the Seattle CPI. Benefit adjustments are made April 1 of each year.

LEOFF 1 retirees and eligible spouses receive the same retirement benefits and post-retirement increases. Table 9 shows averages for all annuitants.

Table #9

Summary of LEOFF 1 Annuitants	
Total Number	7,886
Average	
Current Age	64
Age at Retirement	51
Years of Service	22
Monthly Benefit	$ 2,618
Monthly Benefit per Year of Service	$ 138

Table #10

Basis for LEOFF 1 COLAs Urban Wage Earners and Clerical Workers, Seattle, WA All Items, Series A					
Year	**Increase**	**Year**	**Increase**	**Year**	**Increase**
1986	0.71%	**1991**	5.53%	**1996**	3.30%
1987	2.35%	**1992**	3.54%	**1997**	3.10%
1988	3.35%	**1993**	2.98%	**1998**	2.63%
1989	4.68%	**1994**	3.66%	**1999**	3.10%
1990	7.11%	**1995**	2.90%	**2000**	3.75%
5-Yr. Avg.	3.64%		3.72%		3.18%

Plan 2/3 Defined Benefit COLA:

The Plans 2/3 COLA is often described as 3% a year, or up to 3% a year based on increases in the CPI. This is a generally accurate description of the actual increases members have received in the past. It is not a full description of the benefit's design.

The Plan 2/3 COLA is similar to the LEOFF 1 COLA in that each retiree is entitled to the full CPI increase from retirement. The difference is that Plan 2/3 retirees can never get an increase that is greater than 3% of the previous year's benefit. The CPI has almost always been greater than 3% and therefore, all Plan 2/3 retirees have received 3% COLAs in most years.

The size of each Plan 2/3 retiree's COLA is determined by the total amount of change in the CPI since the year they retired. Retirees of different years can receive a different COLA amount depending on the total increase in the CPI since their retirement. There is also the possibility Plan 2/3 retirees could get an increase when the CPI is negative. This would happen when the total increase in the CPI has averaged more than 3% per year since retirement.

Plan 2/3 retirees receive a COLA on the first July 1st after they have been retired one year. Plan 2/3 survivors receive the same COLA as retired members.

Plan 2/3 members need to be age-65 to receive unreduced benefits. If they retire prior to age-65 they must take an actuarially reduced benefit. The calculation of the actuarially reduced benefit includes a reduction for beginning the COLA earlier than age-66.

Plan 2 members are considered retired when they begin receiving monthly benefits. In Plan 3, a member is not considered retired for COLA purposes until they begin receiving monthly benefits from the defined benefit portion of their benefits.

Table #11

Summary of Plan 2/3 Annuitants	Plan 2				Plan 3	
	LEOFF[1]	PERS	TRS	SERS	TRS	SERS
Total Number	169	7,680	589	126	142	38
Average						
Current Age	61	69	67	65	60	63
Age at Retirement	57	65	64	65	59	63
Years of Service	13	11	13	15	15	16
Monthly Benefit	$ 1,003	$ 514	$ 812	$ 486	$ 346	$ 247
Monthly Benefit per YOS	$ 77	$ 44	$ 63	$ 31	$ 23	$ 16

[1] *LEOFF data as of 6/30/01, all others 7/31/01.*

TRS Plan 3 Gain-sharing Distributions:

Plan 3 benefits include a gain-sharing benefit similar to the one administered for PERS/TRS 1 retired members. The primary differences in benefits are:

- Plan 3 gain-sharing is distributed in the form of a lump sum deposited into members' defined contribution accounts.
- Plan 3 extraordinary gains are not specifically designed as cost-of-living adjustments as they are in Plan 1. They do serve the same function of increasing the overall value of benefits.
- Retirees and actives receive the benefit of extraordinary gains at the same time.

The amount of each gain-sharing distribution is dependent on the rate of return (ROR) on defined benefit investments of plan 2/3. When the ROR for the previous two biennium averages over 10%, half of the amount over 10% is used to provide a lump sum payment to active and retired members.

The first TRS 3 gain-sharing payments were made in 1998. A second one occurred in 2000. In the future two new plans, SERS 3 and PERS 3 will also be part of the gain-sharing calculation. A gain share is calculated using all Plan 3 service earned to date. Individual members receive payments based on the gain share, multiplied by their years of service. Gain-sharing is calculated and distributed to members' defined contribution accounts in January of even-numbered years (once each biennium.)

Calculation of the 2002 Plan 3 Gain-sharing Distribution:

Rates of return were as follows for the 4 years between 1998 and 2001:

Table #12

Commingled Trust Fund Rates of Return				
1998	1999	2000	2001	4-Year Average
16.6%	11.9%	14.9%	(5.96)%	8.80%

Table #13

TRS 3 Gain-sharing
Historical Summary

Year	Eligible Members	Average Years of Service	Total Dollars Distributed *(In Millions)*	Share Per YOS	Average Dollars to Members
1998	27,243	7.8	$ 28.4	$ 134.43	$ 1,042
2000	35,529	8.1	$ 72.9	$ 254.23	$ 2,051
2002	N/A	N/A	$ 0	$ 0	$ 0
Total			**$ 101.3**		**$ 3,093**

Table #14

TRS 3 Gain-sharing
2000 Distribution

	Total			Average	
Eligible Members	**Number**	**Years of Service**	**Dollars Distributed** *(In Millions)*	**Years of Service**	**Dollars to Member**
Active	34,749	278,641	$71	8.0	$2,039
Retired	225	2,590	$1	11.5	$2,926
Term-Vested	555	5,471	$1	9.9	$2,507
Total	**35,529**	**286,702**	**$73**	**8.1**	**$2,051**
Ineligible Members					
Not Vested	2,257	3,474		1.5	
DC Account Balance Less Than $1,000	3,397	1,033		0.3	
Total	**5,654**	**4,508**		**0.8**	

Washington State Patrol:

2001 COLA Policy:

Unlike other Washington retirement systems, the Washington State Patrol Retirement System (WSP) provides two different levels of benefits for retirees and their survivors. Originally, retirees received a benefit based on their years of service and increased each year by a simple 2% non-compounding COLA. Survivors received a benefit which was half of the member's average final salary and did not increase.

In 1999, the Legislature responded to concerns about WSP beneficiaries' loss of purchasing power by authorizing the Department of Retirement Systems to design a new retirement benefit payment option that allowed retirees to provide inflation protection to their survivors. Retirees after July 1, 2000 could choose to receive an actuarially reduced benefit which continued on to their beneficiary at the same level and included an annual 2% simple COLA.

In 2001, the WSP COLA design was altered again. Beginning July 1, 2001, both retirees and survivors receive an annual benefit increase of up to 3%, based on increases in the Consumer Price Index (CPI). This is the same COLA design used in the Plan 2/3 tiers. The new design applies to both future annuitants and those who have already begun receiving benefits.

Table #15

Summary of WSP Annuitants
(As of 12/31/00)

	Service Retirees	Beneficiaries
Total Number	695	104
% of total Annuitants	85%	15%
Average		
Current Age	62	71
Age at Retirement	51	
Years of Service	29	25
Monthly Benefit	$ 2,919	$ 1080
Monthly Benefit per Year of Service	$ 101	$ 68

The summary table above shows separate data for WSP retirees and beneficiaries. Compared to annuitants in all other systems (see Table #2, page 3) the average WSP beneficiary receives a benefit per month per year of service above PERS/TRS 1 and the Plans 2/3. The average monthly benefit per year of service in PERS/TRS 1 is $50 and in the Plans 2/3 is $46.

COLA Report Addendum

March 1, 2002

COLA Report Addendum

Low Retirement Benefits Relative to COLA Design and Targeting

Reasons for Low Benefits and Retiree Characteristics

Additional analysis was performed on the 2001 COLA data to examine both the factors that result in low retirement benefits and the characteristics of low benefit retirees. In this instance, low retirement benefits have been defined as benefits less than $29.44 per month per year of service; that is the benefit threshold at which a current Plan 1 member, upon retirement, would be eligible to begin receiving a COLA prior to age 66.

Background:

This analysis will primarily focus on low benefit retirees from the Plan 1 systems. While there are numerous Plan 2 retirees with relatively low benefits, these are primarily a result of the short periods of service. As this issue of low benefits is the foundation of a COLA discussion, and as the Plan 2 COLA provisions afford its members purchasing power protection indexed to the Seattle CPI, they are not included in this analysis.

Basis of Analysis:

Data used in this analysis is derived from the retiree's gross monthly benefit. This is the benefit the retiree has earned before reductions are applied for joint and survivor payment options, withdrawals of contributions, and other voluntary deductions. Data were then adjusted to a "dollars per month per year of service" standard. This method removes the effects that short service has on benefits and results in comparable figures for both short and long service retirees.

Issues Related to Low Benefits

There are a variety of reasons retirement benefits may be low, several of which are unrelated to inflation. A member may have:

- Earned a low wage for a long period of service,
- Earned a high wage but for a short period of service or part-time service,
- Terminated employment well before normal retirement age and remained vested,
- Taken the available options (withdrawing their contributions, taking a joint and survivor option, etc.),
- Retired early,
- Retired on disability,
- Left a survivor, or
- Retired a long time ago.

Pay and Service:

The Plan 1 system is a defined benefit system using a common benefit formula based on a member's pay and years of service. Both elements – pay and service – have significant bearing on the ultimate benefit a member may receive. A member may earn a high wage, and be credited with a full years service because of generous service credit provisions, but because of low hours may still have a low retirement benefit. A member also may receive a low retirement benefit because they earned a low wage. (See Table 1)

Table #1

	Part-time/ High Pay	Full-time/ Low Pay
Annual Hours	630	2,080
% of Full-time	30%	100%
Hourly Rate	$ 28.00	$ 8.49
Annual AFC	$ 17,640	$ 17,664
Benefit per Month/YOS	**$ 29.40**	**$ 29.44**

Terminated Vested:

If a member leaves service prior to retirement age, and leaves their contributions in the retirement system, they are terminated-vested or term-vested. They are still eligible to receive a benefit when they reach retirement age. When they do receive a benefit, it will be based on their salary and service credit at the time they terminated. As a result, the benefit they receive will be based on a salary that may be several years old. A PERS 1 member who terminated at age 55 would have to wait 10 years before being eligible for an unreduced retirement benefit. In 10 years time inflation could have reduced the purchasing power of their last salary by upwards of 30 percent.

Benefit Options: Gross vs. Net

A member may also have a low retirement benefit because of the options they chose upon retirement. In the TRS 1 plan members may withdraw some or all of the contributions they made to the plan; this will reduce their residual or net benefit based on their age and amount withdrawn. Members may also opt to provide varying levels of survivor protection for a spouse; a joint and 100% survivor benefit can reduce a gross benefit by more than 20% in PERS 1. Taken in combination, these options can reduce a member's benefit significantly, making it appear that they are receiving a lesser benefit than in reality. It is for this reason that benefits are adjusted to their gross level prior to making comparisons in this analysis.

Disability:

Plan 1 members who retire because of a disability are more likely to have a low retirement benefit. Disability retirees retire earlier with a benefit based on a lower wage and shorter service, and they are retired longer than average before being eligible for a COLA.

Early Retirement:

Early retirees are similar to disability retirees in their likelihood to receive a low retirement benefit. The important difference between the two is the matter of choice: early retirees do so voluntarily, not so for disability retirees.

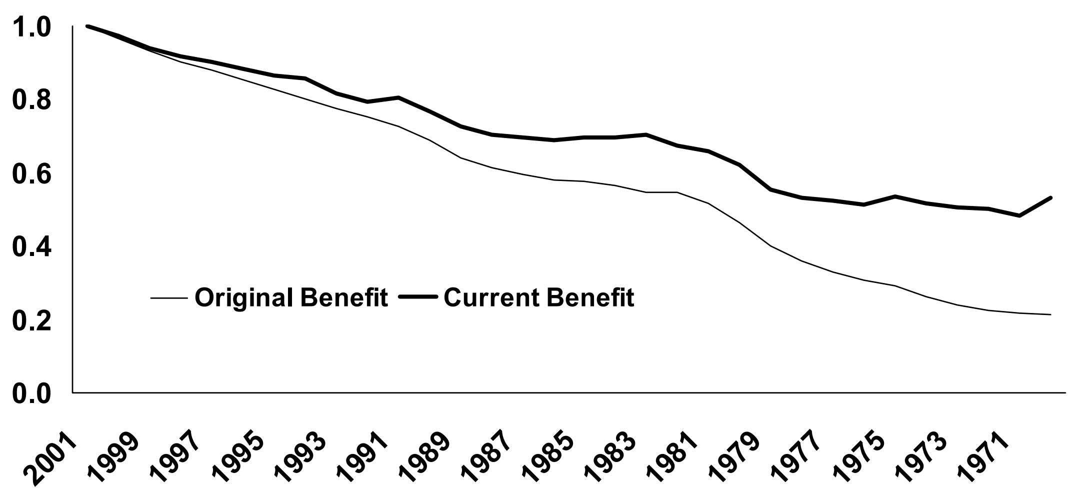
Survivors:

These are the beneficiaries of members who elected a joint and survivor benefit payment option. A member taking a joint and 50% payment option will leave their beneficiary with half their original joint benefit after they die, a much lower benefit than if they chose the joint and 100% payment option. This may result in a survivor receiving a low benefit under this definition.

Long Term Retirees:

Long term retirees are also likely to have low retirement benefits. The inflationary impact on long-term retirees is self evident. Even with a modest 3.0% inflation, a retiree's benefit's can lose nearly 10% of its original purchasing power in just 3 years. Those retired for long periods can lose significantly more, with the only relief being during periods of relatively low inflation (see graph below).

Graph #1
Purchasing Power Analysis
PERS Service Retirees



Inflation Relation:

COLAs exist to protect against the effects of inflation. Therefore, it is helpful to differentiate those receiving "low retirement benefits" by whether their low benefits are caused by inflation or by their own choices.

Not Caused by Inflation:

Those receiving a low retirement benefit because of the nature of their job can be grouped into those not caused by inflation. A member who receives a low retirement benefit because they were employed in a high-wage job but on a part-time schedule cannot be considered inflation related. The same holds for a member with a low-paying job on a full-time schedule. Also not caused by inflation are the choices retirees make in their benefit; withdrawal of contributions, and joint and survivor optional payment levels being among these.

Caused by Inflation:

Among those members whose low retirement benefit was caused by inflation are those whose benefit did not begin as a low benefit but rather became a low benefit over time. This includes those who chose to retire early or terminate and remain vested. It also includes those who had no choice in their situation – disability retirees and long-term retirees.

Purchasing Power Retention:

So there are a variety of reasons that retirees may have a low benefit other than the diminished purchasing power resulting from inflation. As a result, any COLA design would do well to look beyond the level of benefits and examine, instead, how well benefits have retained their purchasing power.

Low-Benefit Retiree Characteristics

Plan 1 Minimum Benefit Threshold:

The Plan 1 Uniform COLA was created in 1995. A minimum benefit threshold was established In conjunction with the Uniform COLA. The minimum benefit threshold was originally $24.22 per month per year of service. Each year the minimum has increased by the Uniform COLA amount – as of 2001, the minimum benefit was $29.44.

> In a very basic way, a minimum benefit is almost antithetical to the current defined benefit plans. The two primary elements that determine benefits in these plans are pay and service; the higher the pay and longer the service the greater the benefit. By setting a minimum benefit per month per year of service, pay is removed from the equation or at least pay that is atypically low.

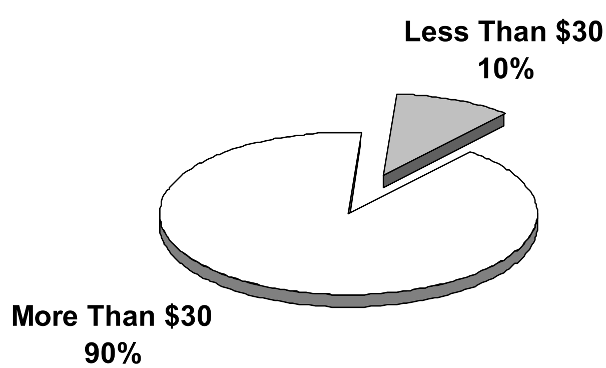
Plan 1 retirees do not receive a COLA until age 66 unless their benefit is below the Minimum Benefit threshold at the time of retirement. If at retirement their benefit is below the minimum threshold, their benefit is adjusted to the minimum and then maintained at that level.

The Minimum Benefit was not retroactive when it passed in 1995. While all Plan 1 retirees meeting the age requirement began receiving the Uniform COLA in 1995, those who were retired before 1995 were not eligible for the Minimum. Those not eligible for the minimum will fall into what may be called the Low Benefit group. It is these retirees whose characteristics will be examined.

Characteristics of Low Benefit Annuitants:

In 2001, there were 9,467 PERS/TRS 1 annuitants receiving less than $30 per month/YOS. This represents approximately 10% of the current 83,000 PERS/TRS 1 annuitants. Of all annuitants receiving less than $30 per month/YOS, 99% receive at least $25 per month/YOS. Only 673, (less than 1% of all benefit annuitants) receive less than $25 per month/YOS.

Graph #2
Share of PERS 1 and TRS 1 Annuitants by Low Benefit Threshold
All PERS/TRS Annuitants



Eligibility for a COLA:

As demonstrated in the following graph and table, most low benefit annuitants are currently receiving annual increases either through Minimum Benefit or Uniform COLA eligibility. Each annual increase amount is 3% greater than the previous year, plus any gain-sharing distributions. The 2001 Min/Ben threshold maintains all but a few hundred annuitants at or above $29.44 per month per year of service. The threshold creates the sharp cliffs in graphs 3 and 4.

Sixty-four annuitants who receive less than the current Min/Ben threshold are eligible for a COLA. These may be annuitants who were receiving low benefits when the Min/Ben was established seven years ago.

Those below the threshold amount and not receiving annual COLAs are primarily elected officials whose member contributions and interest totaled less than $750 at the time of their retirement. These members are ineligible for the minimum benefit.

Graph #3
PERS/TRS 1 Annuitants
COLA Eligibility By Benefit Per Month/YOS

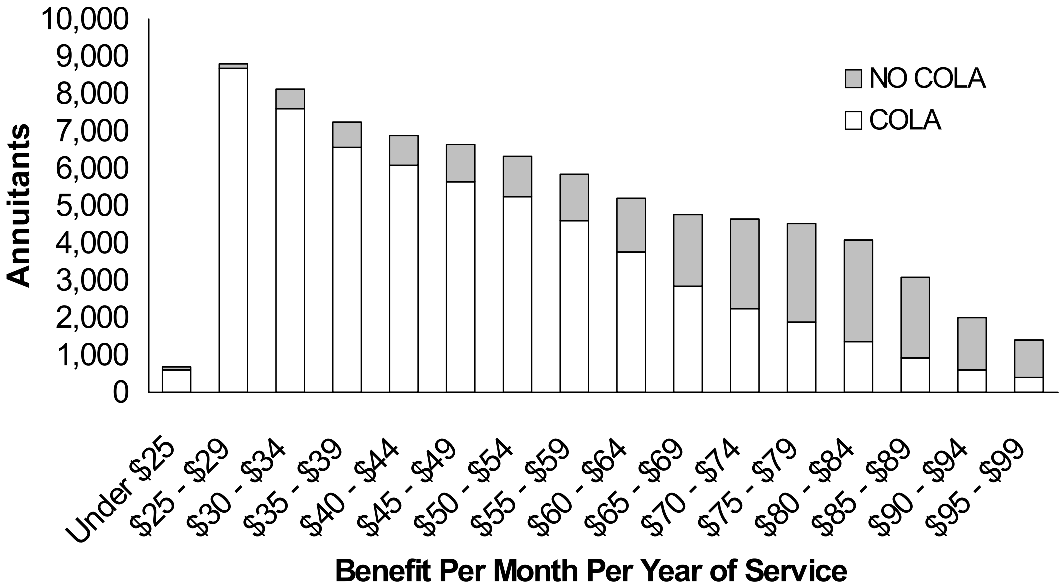


Table #2

PERS/TRS 1 Annuitants
COLA Eligibility By Benefit Per Month/YOS

Benefit Per Month/YOS	COLA	No COLA
Under $10	3	39
$10 - $14	13	17
$15 - $19	131	10
$20 - $24	462	8
$25 - $29	8,686	108
$30 - $34	7,619	518

Types of Annuitants:

With one exception, the breakdown of low benefit annuitants into categories of eligibility is essentially the same as for all PERS/TRS annuitants. PERS/TRS 1 annuitants at the Min/Ben threshold are in almost the same proportion as in the total annuitant population. In all groups, the largest percent of low benefit annuitants are service retirees. All other categories, except TRS term-vesteds, are within 6% of each other.

In TRS, the percent of term-vested retirees in the total population of annuitants is 10%. In the low benefit group, term-vesteds comprise 43%. It is possible that the PERS/TRS 1 difference in term-vested retirement criteria may be the cause. Additional analysis is necessary to validate this theory.

Table #3

Percent of Annuitants By Benefit Eligibility			
		All PERS/TRS 1 Annuitants	**Low Benefit Annuitants[1]**
PERS	**Service Retirement**	72%	72%
	Early Retirement	6%	6%
	Disabled	3%	8%
	Survivor	11%	9%
	Term-vested	7%	5%
TRS	**Service Retirement**	75%	47%
	Early Retirement	6%	0%
	Disabled	2%	3%
	Survivor	7%	6%
	Term-vested	10%	43%

[1] *$30 per month per year of service or less.*

Types of Employers:

The largest number of low benefit annuitants are those who previously worked for school districts. School district employment numbers are highlighted in table 2 below. These employers retain a disproportionate number of part-time positions including bus drivers, food service employees and educational aides.

Table #4

Low Benefit Annuitants by Employer Type						
		K-12 Education	**Higher Education**	**State Agencies**	**Local Gov**	**Total**
PERS	**Service Retirement**	3,481	479	828	797	5,585
	Early Retirement	370	31	42	24	467
	Disability	285	69	148	99	601
	Survivor	191	47	177	269	684
	Term-vested	212	22	37	125	396
	PERS Total	**4,539**	**648**	**1,232**	**1,314**	**7,733**
TRS	**Service Retirement**	787	20	5	0	812
	Early Retirement	4	0	3	0	7
	Disability	57	1	2	0	60
	Survivor	94	7	0	0	101
	Term-vested	110	11	633	0	754
	TRS Total	**1,052**	**39**	**643**	**0**	**1,734**
PERS/TRS Combined		**5,591**	**687**	**1,875**	**1,314**	**9,467**

Profile of Low Benefit Annuitants:

Low benefit annuitants can be characterized in terms of their own average statistics and how those averages compare to all PERS/TRS 1 annuitants.

Table #5

2000 Annuitant Demographics[1]					
Annuitants	**Current Age**	**Years Retired**	**Years of Service**	**Monthly Benefit**	**Per Month/YOS**
PERS 1	74	13.2	**20.5**	1,040	$ 50.73
TRS 1	71	12.8	**20.5**	1,294	$ 50.74

[1] *Source: 2000 Combined Actuarial Valuations.*

Table #6

Profile of Low Benefit Annuitants

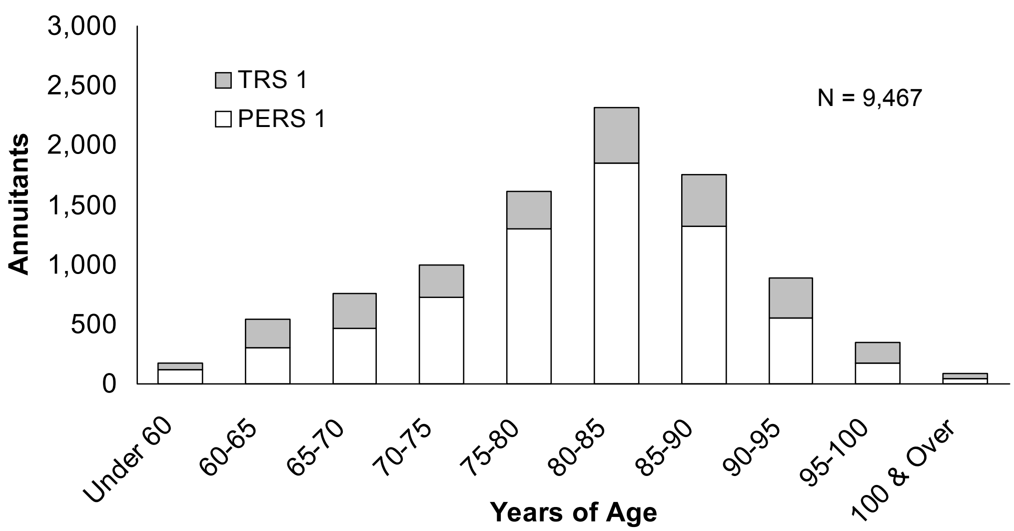
	Benefit Eligibility	Number	Age	Years Retired	Years of Service	Monthly Benefit	Per Month/YOS
PERS	**Service Retirement**	5,585	80	18	**16**	$438	$ 27.38
	Early Retirement	467	68	11	**14**	246	17.57
	Disabled	601	65	15	**16**	297	18.56
	Survivor	684	77	22	**17**	333	19.59
	Term-vested	396	68	11	**14**	246	17.57
	Total	**7,733**	**76**	**17**	**16**	**$408**	**25.50**
TRS	**Service Retirement**	812	82	24	**24**	652	27.17
	Early Retirement	7	54	7	**21**	270	12.86
	Disabled	60	56	9	**20**	377	18.85
	Survivor	101	64	14	**22**	521	23.68
	Term-vested	754	75	17	**15**	341	22.73
	Total	**1,734**	**72**	**17**	**20**	**$498**	**24.90**
PERS/TRS Combined		**9,467**	**75**	**17**	**17**	**$425**	**$ 24.94**

Current Age and Years in Retirement:

A distribution of annuitants by current age reveals that over 50% of those in PERS 1 and just less than 75% of those in TRS 1, are age-80 or over. The average age for retirement in these Plans is age-60. This suggests that for most annuitants, the benefits being received are based on salaries earned at least 20 years ago.

Graph #4

Low Benefit Annuitants
By Years of Age and Plan
(Benefits Less than $30 per Month/YOS)



Graph #5
Low Benefit Annuitants
By Years Retired and Plan
(Benefits Less than $30 per Month/YOS)

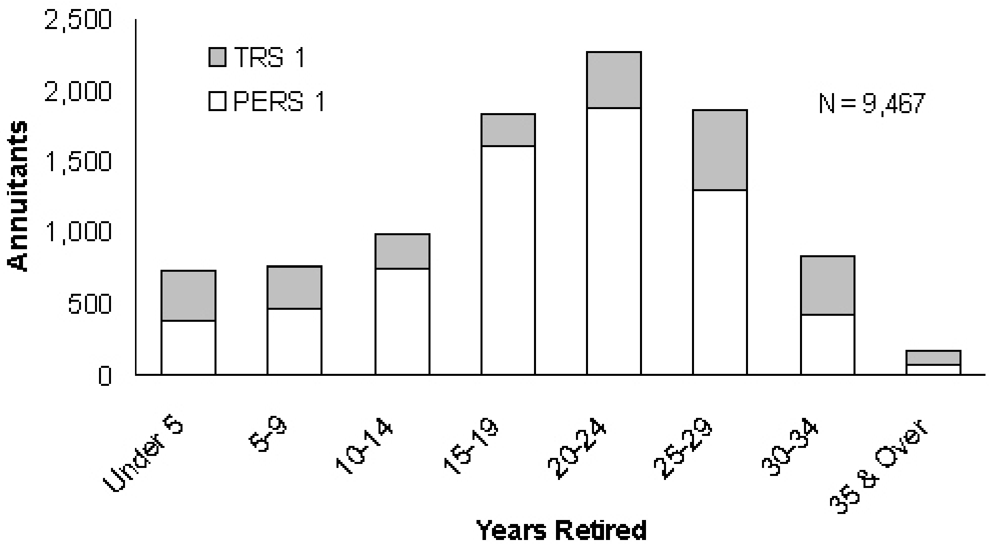
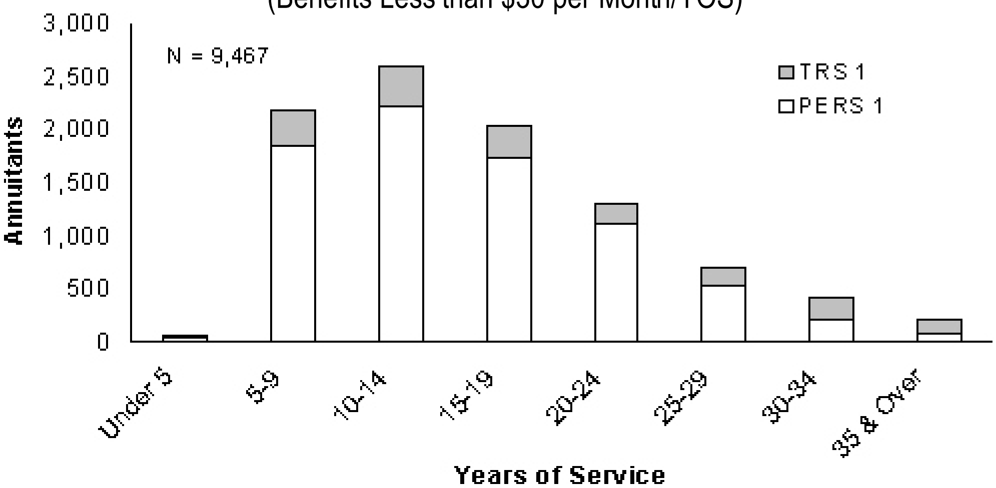


Table 5 shows that PERS low benefit annuitants in all categories average less than the 20 to 25 YOS typically considered a full career. The average service earned by all PERS 1 annuitants is slightly over 20 years. The average for all PERS 1 low benefit annuitants was 16 years. TRS 1 low benefit annuitants average 20 YOS, compared to 25.5 YOS for all TRS 1 annuitants.

The graph below shows the actual distribution of PERS and TRS annuitants by years of service. Here it is demonstrated that 75% of PERS 1 and 59% of TRS 1 low benefit annuitants have less than 20 YOS. TRS 1 annuitants average more service, but over half of low benefit annuitants are not career employees.

Graph #6
Low Benefit Annuitants
By Years of Service and Plan
(Benefits Less than $30 per Month/YOS)



Characteristics of Long-term Low Benefit Annuitants:

When the data is divided between those annuitants with less than 20 YOS and those with 20 or more, the following characteristics are shown.

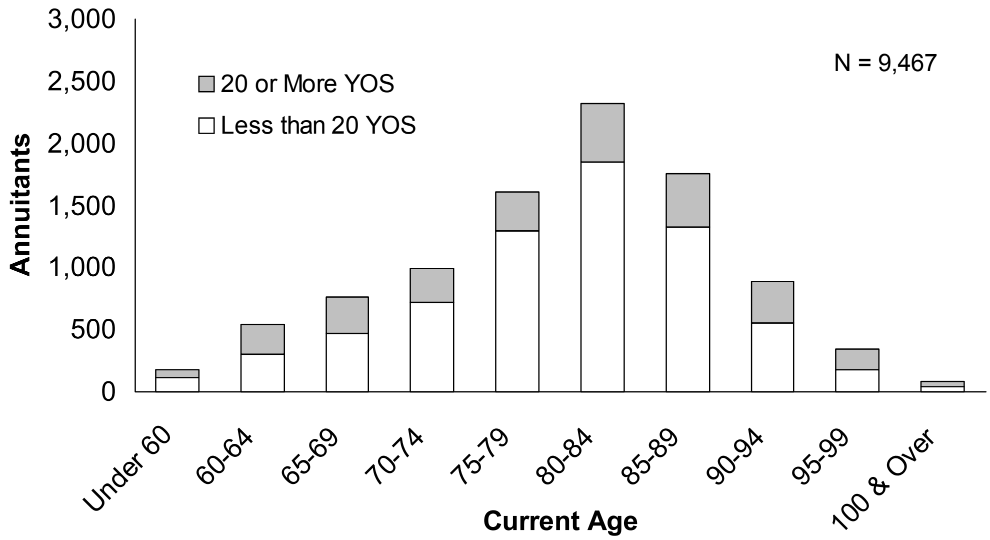
Table #7

Profile of Low Benefit Annuitants With 20 YOS or More

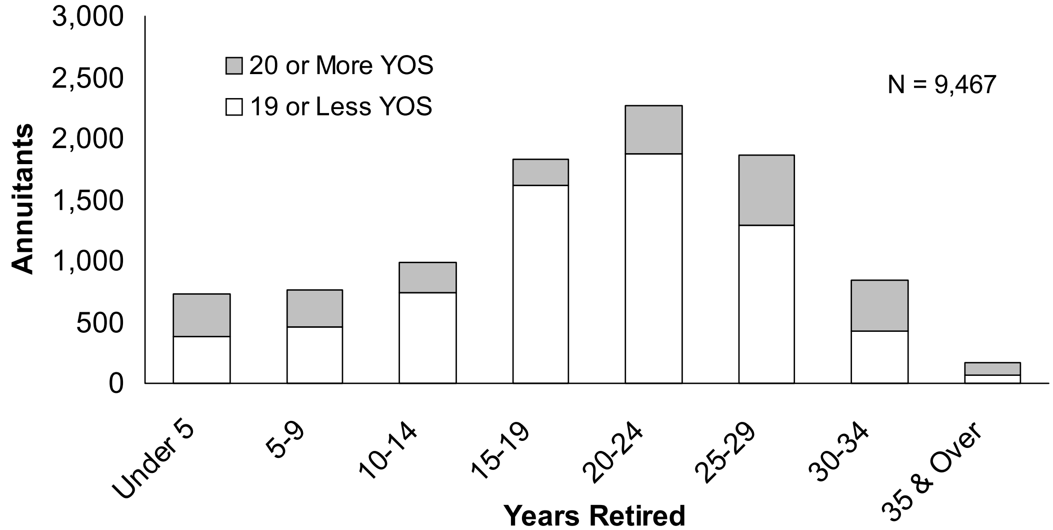
			Average			
	Benefit Eligibility	**Number**	**Age**	**Years Retired**	**Years of Service**	**Monthly Benefit**
PERS	**Service Retirement**	1,515	74	15	**25**	$696
	Early Retirement	120	60	10	**23**	$628
	Disabled	61	57	9	**23**	$563
	Survivor	178	71	18	**24**	$549
	Term-vested	27	56	8	**23**	$490
	Total	1,901	69	13	**24**	$671
TRS	**Service Retirement**	535	82	24	**28**	$810
	Early Retirement	1	55	8	**23**	$492
	Disabled	4	55	8	**23**	$689
	Survivor	60	64	14	**25**	$665
	Term-vested	104	67	14	**23**	$616
	Total	704	69	16	**25**	$768
	PERS/TRS Combined	**2,605**				

Graph #7

PERS/TRS 1 Low Benefit Annuitants
By Current Age and Years of Service
(Benefit less than $30 per Month/YOS)



Graph #8
Low Benefit Annuitants
By Years Retired and Years of Service



Graph #9
Low Benefit Annuitants
By Years of Service
(Benefit Less than $30 per Month/YOS)